

SAFETY DATA SHEET

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product Name WW-IPC-3

Product Description 1000 µg/mL: K, P; 200 µg/mL: Al, As, B, Ba, Be, Ca, Cd, Co, Cr, Cu, Fe, Li, Mg, Mn, Na, Ni, Pb, Se, Sr, Tl, V, Zn; 25 µg/mL: Ag

Contains Nitric acid; Phosphoric acid

1.2. Relevant identified uses of the substance or mixture and uses advised against

Recommended Use Laboratory chemicals

Uses advised against No information available

1.3. Details of the supplier of the safety data sheet

Company

Inorganic Ventures
300 Technology Drive
Christiansburg, VA 24073
Phone: 1(800) 669-6799
Email: info@inorganicventures.com

1.4. Emergency telephone number

Chemtrec 1-800-424-9300 (North America)

Chemtrec +1 703-741-5970 (International)

Europe	See above
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SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to
Regulation (EC) No. 1272/2008 [CLP]

GHS

Skin corrosion/irritation	Category 1 Sub-category B - (H314)
Acute aquatic toxicity	Category 1 - (H400)
Chronic aquatic toxicity	Category 1 - (H410)
Corrosive to metals	Category 1 - (H290)

2.2. Label elements

Product identifier

Contains Nitric acid; Phosphoric acid

**Signal word**

Danger

Hazard statements

H314 - Causes severe skin burns and eye damage

H410 - Very toxic to aquatic life with long lasting effects

H290 - May be corrosive to metals

Contains Beryllium di(acetate) May produce an allergic reaction

EUH071 - Corrosive to the respiratory tract

Precautionary Statements - EU (§28, 1272/2008)

P234 - Keep only in original container

P260 - Do not breathe dust/fume/gas/mist/vapors/spray

P303 + P361 + P353 - IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower

P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

P310 - Immediately call a POISON CENTER or doctor/physician

P391 - Collect spillage

P501 - Dispose of contents/container in accordance with local, regional, national, and international regulations as applicable

2.3. Other hazards

Inhalation of vapors in high concentration may cause irritation of respiratory system

Aspiration may cause pulmonary edema and pneumonitis

SECTION 3: Composition/information on ingredients**3.1 Substances**

Chemical name	EC No (EU Index No)	CAS No.	Weight-%	Classification according to Regulation (EC) No. 1272/2008 [CLP]	REACH registration number
Nitric acid	231-714-2 0	7697-37-2	5	(EUH071) Skin Corr. 1A (H314) Ox. Liq. 3 (H272) Acute Tox. 3 (H331)	No data available
Phosphoric acid	231-633-2 0	7664-38-2	0.31638	Skin Corr. 1B (H314)	No data available
Beryllium di(acetate)	208-850-6 0	543-81-7	0.22556	Acute Tox. 3 (H301) Skin Irrit. 2 (H315) Skin Sens. 1 (H317) Eye Irrit. 2 (H319) Acute Tox. 2 (H330) STOT SE 3 (H335) Carc. 1B (H350i) STOT RE 1 (H372) Aquatic Chronic 2 (H411)	No data available
Boric acid (H ₃ BO ₃)	233-139-2 0	10043-35-3	0.11273	Repr. 1B (H360FD)	No data available

Full text of H- and EUH-phrases: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

General Advice	Immediate medical attention is required. Show this safety data sheet to the doctor in attendance.
Inhalation	Call a physician or poison control center immediately. Remove to fresh air. If breathing is difficult, give oxygen. If breathing is irregular or stopped, administer artificial respiration. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation.
Skin Contact	Immediate medical attention is required. Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes.
Eye Contact	Immediate medical attention is required. Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Keep eye wide open while rinsing. Do not rub affected area.
Ingestion	Immediate medical attention is required. Do NOT induce vomiting. Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person.
Self-protection of the first aider	Use personal protective equipment as required. Avoid contact with skin, eyes or clothing.

4.2. Most important symptoms and effects, both acute and delayed

Most Important Symptoms and Effects	Burn. Difficulty in breathing.
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4.3. Indication of any immediate medical attention and special treatment needed

Notes to Physician	Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated. Do not give chemical antidotes. Asphyxia from glottal edema may occur. Marked decrease in blood pressure may occur with moist rales, frothy sputum, and high pulse pressure
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SECTION 5: Firefighting measures**5.1. Extinguishing media****Suitable Extinguishing Media**

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable Extinguishing Media

No information available

5.2. Special hazards arising from the substance or mixture

Thermal decomposition can lead to release of irritating gases and vapors

5.3. Advice for firefighters

Wear self-contained breathing apparatus and protective suit. Use personal protection equipment.

SECTION 6: Accidental release measures**6.1. Personal precautions, protective equipment and emergency procedures****Personal Precautions**

Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak. Ensure adequate ventilation. Use personal protective equipment as required. Do not get in eyes, on skin, or on clothing.

Advice for emergency responders

Ensure adequate ventilation.

6.2. Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not flush into surface water or sanitary sewer system. Prevent product from entering drains. See Section 12 for additional Ecological Information. Avoid release to the environment. Collect spillage. Dispose of contents/container to an approved waste disposal plant.

6.3. Methods and material for containment and cleaning up

Methods for Containment Prevent further leakage or spillage if safe to do so.

Methods for Cleaning Up Take up mechanically, placing in appropriate containers for disposal.

6.4. Reference to other sections

See Section 12: ECOLOGICAL INFORMATION.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling
Ensure adequate ventilation.

Hygiene Measures

Handle in accordance with good industrial hygiene and safety practice. Wear suitable gloves and eye/face protection. Avoid contact with skin, eyes or clothing. Do not eat, drink or smoke when using this product. Wash hands before breaks and immediately after handling the product. Remove and wash contaminated clothing and gloves, including the inside, before re-use. Contaminated work clothing should not be allowed out of the workplace. Regular cleaning of equipment, work area and clothing is recommended.

7.2. Conditions for safe storage, including any incompatibilities

Storage Conditions

Keep container tightly closed in a dry and well-ventilated place.

7.3. Specific end use(s)

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure Limits

Chemical name	European Union	United Kingdom	France	Spain	Germany DFG	
Nitric acid 7697-37-2	STEL: 1 ppm STEL: 2.6 mg/m³	STEL: 1 ppm STEL: 2.6 mg/m³	STEL: 1 ppm STEL: 2.6 mg/m³	STEL: 1 ppm STEL: 2.6 mg/m³		
Phosphoric acid 7664-38-2	TWA: 1 mg/m³ STEL: 2 mg/m³	TWA: 1 mg/m³ STEL: 2 mg/m³	TWA: 0.2 ppm TWA: 1 mg/m³ STEL: 0.5 ppm STEL: 2 mg/m³	TWA: 1 mg/m³ STEL: 2 mg/m³	TWA: 2 mg/m³ Peak: 4 mg/m³	
Beryllium di(acetate) 543-81-7		TWA: 0.002 mg/m³ STEL: 0.006 mg/m³	TWA: 0.002 mg/m³	TWA: 0.0002 mg/m³		
Boric acid (H3BO3) 10043-35-3				TWA: 2 mg/m³ STEL: 6 mg/m³	TWA: 10 mg/m³ Peak: 10 mg/m³	
Chemical name	Italy MDLPS	Portugal	Netherlands	Finland	Denmark	
Nitric acid 7697-37-2	STEL: 1 ppm STEL: 2.6 mg/m³	TWA: 2 ppm STEL: 1 ppm STEL: 2.6 mg/m³	STEL: 1.3 mg/m³	TWA: 0.5 ppm TWA: 1.3 mg/m³ STEL: 1 ppm STEL: 2.6 mg/m³	STEL: 1 ppm STEL: 2.6 mg/m³	
Phosphoric acid 7664-38-2	TWA: 1 mg/m³ STEL: 2 mg/m³	TWA: 1 mg/m³ STEL: 2 mg/m³	TWA: 1 mg/m³ STEL: 2 mg/m³	TWA: 1 mg/m³ STEL: 2 mg/m³	TWA: 1 mg/m³	
Beryllium di(acetate) 543-81-7		STEL: 0.01 mg/m³ Sensitizer			TWA: 0.00002 mg/m³	
Boric acid (H3BO3) 10043-35-3		TWA: 2 mg/m³ STEL: 6 mg/m³				
Chemical name	Sweden	Austria	Switzerland	Poland	Norway	Ireland
Nitric acid 7697-37-2	LLV: 0.5 ppm LLV: 1.3 mg/m³	STEL 1 ppm STEL 2.6 mg/m³	TWA: 2 ppm TWA: 5 mg/m³	TWA: 1.4 mg/m³ STEL: 2.6 mg/m³	TWA: 2 ppm TWA: 5 mg/m³	STEL: 1 ppm STEL: 2.6 mg/m³

	Binding STLV: 1 ppm Binding STLV: 2.6 mg/m ³		STEL: 2 ppm STEL: 5 mg/m ³		STEL: 4 ppm STEL: 10 mg/m ³	
Phosphoric acid 7664-38-2	LLV: 1 mg/m ³ Binding STLV: 2 mg/m ³	TWA: 1 mg/m ³ STEL 2 mg/m ³	TWA: 2 mg/m ³ STEL: 4 mg/m ³	TWA: 1 mg/m ³ STEL: 2 mg/m ³	TWA: 1 mg/m ³ STEL: 3 mg/m ³	TWA: 1 mg/m ³ STEL: 2 mg/m ³
Beryllium di(acetate) 543-81-7			TWA: 0.002 mg/m ³ S+			TWA: 0.0002 mg/m ³ STEL: 0.0006 mg/m ³ Sk* Sens+
Boric acid (H3BO3) 10043-35-3			TWA: 1.8 mg/m ³ STEL: 1.8 mg/m ³			TWA: 2 mg/m ³ STEL: 6 mg/m ³

Derived No Effect Level (DNEL) No information available

Predicted No Effect Concentration (PNEC) No information available.

8.2. Exposure controls

Engineering Measures Ensure adequate ventilation, especially in confined areas.

Personal protective equipment

Eye/Face Protection

Wear safety glasses with side shields (or goggles).

Hand Protection

Impervious gloves.

Skin and Body Protection

Impervious clothing. Boots. Chemical resistant apron.

Respiratory Protection

When workers are facing concentrations above the exposure limit they must use appropriate certified respirators. If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn.

Environmental Exposure Controls Prevent product from entering drains.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state

Liquid

Appearance

clear/ grey

Odor

Odorless

pH - VALUE 1

No data available

Melting point / melting range

No data available

Initial boiling point and boiling range

100 °C / 212 °F

Literary reference

Evaporation rate

No data available

Flammability (solid, gas)

No data available

Vapor pressure @20 °C (kPa)

No data available

Relative vapor density

No data available

Relative Density

No data available

Specific gravity - VALUE 1

No data available

Water solubility

Miscible

Literary reference

Partition coefficient: n-octanol/water

No data available

Autoignition temperature

No data available

Decomposition temperature

No data available

Dynamic viscosity - VALUE 1

No data available

Explosive Properties

No information available

Oxidizing Properties

No information available

VOC content

No information available

SECTION 10: Stability and reactivity**10.1. Reactivity**

No data available.

10.2. Chemical stability

Stable under normal conditions.

Explosion Data

Sensitivity to Mechanical Impact None.

Sensitivity to Static Discharge None.

10.3. Possibility of hazardous reactions**Hazardous Polymerization**

None under normal processing.

Hazardous Reactions

None under normal processing.

10.4. Conditions to avoid

None known.

10.5. Incompatible materials

Bases Cyanides

10.6. Hazardous decomposition productsNitrogen oxides (NO_x).

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute Toxicity

Product Information

The product causes burns of eyes, skin and mucous membranes.

Inhalation

Causes burns. Corrosive to respiratory system. Inhaled corrosive substances can lead to a toxic edema of the lungs. Contact with moist mucous membranes of the respiratory system can cause caustic condition resulting in burns. Aspiration may cause pulmonary edema and pneumonitis.

Eye Contact

Causes burns.

Skin Contact

Causes burns.

Ingestion

Can burn mouth, throat, and stomach.

The following values are calculated based on chapter 3.1 of the GHS document

ATEmix (inhalation-dust/mist) 10.02 mg/l

ATEmix (inhalation-vapor) 53.00 mg/l

Unknown acute toxicity

0 % of the mixture consists of ingredient(s) of unknown acute toxicity.

0 % of the mixture consists of ingredient(s) of unknown acute oral toxicity.

0 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity.

0 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas).

0 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapor).

0 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist).

Component Information

Skin corrosion/irritation

No information available.

Serious eye damage/eye irritation

No information available.

Sensitization

No information available.

Mutagenic Effects

No information available.

Carcinogenic effects

Chemical name	European Union
Beryllium di(acetate)	Carc. 1B

Reproductive Toxicity

No information available.

STOT - single exposure

No information available.

STOT - repeated exposure

May cause disorder and damage to the. blood. Central nervous system. Nervous system. lungs. Respiratory system.

Neurological Effects

Prolonged or excessive exposure to manganese in dust or fumes may cause irreversible central nervous system damage (Manganism). Symptoms resemble Parkinson's disease and include tremors, impaired speech, mask-like face, and impaired movement.

Target organ effects

Skin, Eyes, Respiratory system.

Aspiration hazard

No information available.

SECTION 12: Ecological information

12.1. Toxicity

Very toxic to aquatic life with long lasting effects

Contains 0 % of components with unknown hazards to the aquatic environment

Chemical name	Algae/aquatic plants	Fish	Crustacea
Nitric acid		72: 96 h Gambusia affinis mg/L LC50	
Boric acid (H3BO3)			EC50: 115 - 153mg/L (48h, Daphnia magna)

12.2. Persistence and degradability

No information available.

12.3. Bioaccumulative potential

No information available.

Chemical name	Partition coefficient
Nitric acid	-2.3
Boric acid (H3BO3)	-0.757

12.4. Mobility in soil

Mobility in soil

No information available.

12.5. Results of PBT and vPvB assessment

No information available.

Chemical name	PBT and vPvB assessment
Nitric acid	The substance is not PBT / vPvB
Phosphoric acid	The substance is not PBT / vPvB
Boric acid (H3BO3)	The substance is not PBT / vPvB

12.6. Other adverse effects

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste from Residues/Unused Products

Dispose of in accordance with federal, state and local regulations.

Contaminated Packaging

Do not reuse empty containers.

Other Information

According to the European Waste Catalogue, Waste Codes are not product specific, but application specific. Waste codes should be assigned by the user based on the application for which the product was used.

SECTION 14: Transport information

IMDG

14.1. UN-No

UN3264

14.2. Proper shipping name

Corrosive liquid, acidic, inorganic, n.o.s

14.3. Transport hazard class(es)

8

14.4. Packing Group

III

Description

Not applicable

14.5. Marine Pollutant None
 14.6. Special Provisions None
 No information available Transport No information available
 in bulk according
 to Annex II of MARPOL 73/78 and
 the IBC Code

RID

14.1. UN-No UN3264
 14.2. Proper shipping name Corrosive liquid, acidic, inorganic, n.o.s
 14.3. Transport hazard class(es) 8
 14.4. Packing Group III
 Description Not applicable
 14.5. Environmental hazard None
 14.6. Special Provisions None

ADR

14.1. UN-No UN3264
 14.2. Proper shipping name Corrosive liquid, acidic, inorganic, n.o.s
 14.3. Transport hazard class(es) 8
 14.4. Packing Group III
 Description Not applicable
 14.5. Environmental hazard None
 14.6. Special Provisions None

ICAO

14.1. UN-No UN3264
 14.2. Proper Shipping Name Corrosive liquid, acidic, inorganic, n.o.s
 14.3. Hazard Class 8
 14.4. Packing Group III
 Description Not applicable
 14.5. Environmental hazard None
 14.6. Special Provisions None

IATA-DGR

14.1. UN-No UN3264
 14.2. Proper shipping name Corrosive liquid, acidic, inorganic, n.o.s
 14.3. Transport hazard class(es) 8
 14.4. Packing Group III
 Description Not applicable
 14.5. Environmental hazard None
 14.6. Special Provisions None

SECTION 15: Regulatory information**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture****European Union**

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work

International Inventories

All of the components in the product are on the following Inventory lists: U.S.A. (TSCA), Europe (EINECS/ELINCS/NLP), Canada (DSL/NDSL), Philippines (PICCS), Japan (ENCS), China (IECSC), Australia (AICS), Korea (ECL).

TSCA	Complies
EINECS/ELINCS	Complies
DSL/NDSL	Complies
PICCS	Complies
ENCS	Complies
IECSC	Complies

AIIC	Complies
KECL	Complies

Legend

EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
PICCS - Philippines Inventory of Chemicals and Chemical Substances
ENCS - Japan Existing and New Chemical Substances
IECSC - China Inventory of Existing Chemical Substances
AICS - Australian Inventory of Chemical Substances
KECL - Korean Existing and Evaluated Chemical Substances

15.2. Chemical safety assessment

No information available

SECTION 16: Other information**Full text of R-phrases referred to under sections 2 and 3**

No information available

Full text of H-Statements referred to under section 3

H272 - May intensify fire; oxidizer
H301 - Toxic if swallowed
H314 - Causes severe skin burns and eye damage
H315 - Causes skin irritation
H317 - May cause an allergic skin reaction
H319 - Causes serious eye irritation
H330 - Fatal if inhaled
H331 - Toxic if inhaled
H335 - May cause respiratory irritation
H350i - May cause cancer by inhalation
H360FD - May damage fertility. May damage the unborn child
H372 - Causes damage to organs through prolonged or repeated exposure
H411 - Toxic to aquatic life with long lasting effects

Revision Date 29-Jul-2025

Reason for Revision Not applicable.

This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006

Disclaimer

The information provided on this SDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

End of Safety Data Sheet